

# INDUSTRIAL DEVELOPMENT

STRATEGY

*Puerto Rico*  
THE ALL STAR ISLAND



MANUFACTURING



HEALTH SERVICES



BIOTECHNOLOGY



AGRI-BUSINESS



AEROSPACE



ELECTRONICS



SPECIAL INDUSTRIES



TEXTILES



FINANCIAL SERVICES



INFORMATION TECHNOLOGY



TOURISM



TRANSPORTATION



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EXECUTIVE DIRECTOR  
PUERTO RICO INDUSTRIAL DEVELOPMENT COMPANY



## OUR MISSION

TO POSITION  
**PUERTO RICO**  
AS A GLOBAL LEADER  
IN THE KNOWLEDGE  
**ECONOMY**,  
BASED UPON  
OUR COMPETITIVE  
ADVANTAGES  
TO GENERATE:

**SUSTAINABLE ECONOMIC GROWTH**

**JOB CREATION**

## STRATEGIC PRIORITIES

PROTECT THE EXISTING INDUSTRIAL BASE

ENABLE THE EXPANSION OF EXISTING COMPANIES  
THROUGH CLUSTER STRATEGIES

ATTRACT NEW GLOBAL (AND LOCAL) COMPANIES  
TO INVEST IN PUERTO RICO

IDENTIFY EMERGENT SEGMENTS  
THAT MATCH PUERTO RICO'S CAPABILITIES

## PUERTO RICO'S STRATEGIC CLUSTERS

INTERRELATION BY ACQUIRED COMPETENCIES

### BASED ON THREE MAIN FACTORS:

Human Capital

Support Infrastructure

Financial, Institutional  
and Regulatory Environment



PUERTO RICO'S  
**STRATEGIC CLUSTERS**  
INTERRELATION BY ACQUIRED COMPETENCIES

# TOP COMPANIES OPERATING IN PUERTO RICO

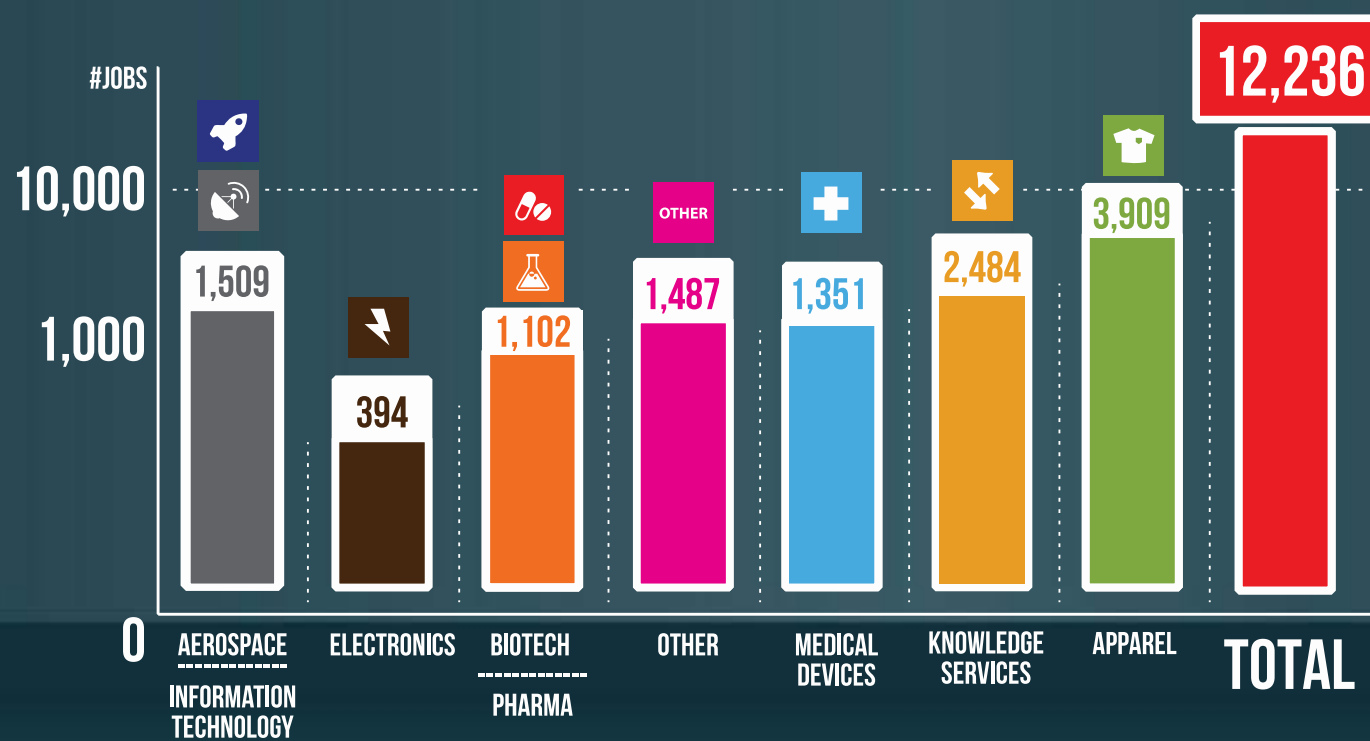


100mi X 35mi





## JOB COMMITMENTS BY SECTOR | MARCH 2014



## SAMPLE DEALS ACHIEVED

Company	Job Commitment / Date	Segment
 Aon Hewitt	200 / February 2013	 Knowledge Services
 COVIDIEN	200 / April 2013	 Medical Devices
 CooperVision	350 / April 2013	 Medical Devices
 IBM Truenorth <small>More than the right direction</small>	400 / May 2013	 Knowledge Services
 PROPPER	2,200 / September 2013	 Military Apparel
 Rock Solid technologies	100 / November 2013	 Knowledge Services & IT
 Lilly	400 / November 2013	 Pharmaceutical
 Medtronic	150 / December 2013	 Medical Devices



## SAMPLE DEALS ACHIEVED

Company	Job Commitment / Date		Segment
<b>Seaborne</b>	400 / December 2013		Aerospace
<b>Infosys</b>	300 / January 2014	 	Aerospace & Knowledge Services
<b>Lufthansa</b>	400 / April 2014		Aerospace
<b>Honeywell</b>	400 / April 2014		Aerospace

## KEY TARGET: CONNECTIVITY

- Improve Puerto Rico relationship with the FCC and US Education Department
- Create a new beginning with the USDE to improve the opportunities of all the PR school participants
- Puerto Rico E-Rate program is important for students, schools and the entire community
- PR has some of the nation's lowest performing high schools and high poverty rates
- Our strength is our human capital. We must develop digital capabilities in the early years of education.

# IMPACT

- Technology Challenges for Teachers
  - In order to keep up with Digital Curricula?
- Student Test Scores
- Demographic Achievement Gap
- College Readiness - Workforce Readiness

# HOW CAN WE IMPROVE CONNECTIVITY?

- Puerto Rico Demographics:
  - 1,461 Schools with 423,394 students
  - 7% Pre-K and Kinder
  - 47% 1<sup>st</sup>-6<sup>th</sup> Grade
  - 42% Middle and High School
  - 4% Special Ed all Ages
- Puerto Rico and ConnectedED:
  - 356,836 Students enrolled in 1,185 E-Rate Eligible Schools

# HOW CAN WE IMPROVE CONNECTIVITY

- Low connection rates

Puerto Rico School Bandwidth as of June 30th 2013		
Bandwidth	Number of Schools	% by Bandwidth
10Mbps	90	6%
5Mbps	113	8%
3 Mbps	853	58%
DSL (2Mbps)	275	19%
T1 (1.55Mbps)	137	9%

- 94% of our schools have only 5Mbps or less
- Puerto Rico needs to increase school bandwidth access

# HOW CAN WE IMPROVE CONNECTIVITY?

2014 Requested Bandwidth for Puerto Rico's 1,185 E-Rate Eligible		
Requested Bandwidth	Number of Eligible Schools	% of Total
5Mbps	4	<1%
10Mbps	53	4%
20Mbps	605	41%
50Mbps	357	24%
100Mbps	165	11%
150Mbps	1	<1%

Only 11 % schools at E- Rate goal of 99% of schools with 100Mbps by 2015  
Our Challenge is how to prepare and plan for goal of 99% with 1Gbps by 2020



# INFRASTRUCTURE STATUS

Current infrastructure serving schools and libraries

- Mainly copper lines (POTS) "*narrow band*" technology (10 Mbps or less)
  - Limited deployment of Broadband type telecommunications infrastructure
    - Fiber systems are used mainly by telecom and cable TV providers for backbone services; limited deployment of fiber system for high users (enterprise) customers.
    - Cable TV operators extend cable facilities to a limited number of public and private schools under "*Cable-in-the-Classroom*" program.
      - This service is provided at no cost to schools but only for video service and could be modified to include Broadband Internet access.
- High Broadband Construction and Operation Infrastructure Costs
  - Deploying underground fiber cable plant (excavation, permit process, potential easement charges) , aerial fiber cable plant (pole attachment rates by electrical utility is much higher than US counterparts).
  - Utility poles represent about 95% of existing poles in PR.

# BROADBAND IMPLEMENTATION POLICY

To foster the deployment of broadband infrastructure across all municipalities and communities in PR

- Participation (telecom industry, private and public)
- Incentives for the construction of Fiber Optic infrastructure.
- Collaboration among state, municipal and federal agencies in support of a public policy to process, obtain and transmit required permits' approval.
- Reduce "pole attachment cost" for deployment of broadband infrastructure (fiber/coax) when such facilities/projects are built for deployment of Broadband services.
- A "*Dig Once*" policy to best control deployment of underground construction projects
- Reduce construction and operational cost of projects
- Allow full coordination of government agencies and telecom industry for planning of new construction projects (fiber, coax, wireless others)

# ACHIEVING CONNECT ED GOALS

- Puerto Rico has the ideal ecosystem to achieve our goals with academia, government, and industry partners (HP, MICROSOFT, IBM, TELECOMM INDUSTRY)
- E-Rate funds are essential in our route for broadband improvement across the Island
- A new beginning of transparency and collaboration between PRDE and the USDE, as well as USAC and the FCC, will improve the federal funding entitled to US citizens in the Island

## OUR PROPOSAL IS TO WORK TOGETHER.

- TO WORK IN AN ACROSS-AGENCY EFFORT TO ADDRESS ANY PENDING OR RECURRING ISSUES.
- TO ENSURE E-RATE PROGRAM REACHES ITS GOAL WHILE ENSURING MUCH NEEDED INVESTMENT IN THE PR ECONOMY.
- TO MEET THE PRESIDENT'S CONNECTED GOALS ACROSS PUERTO RICO.
- TO ACTIVELY PARTICIPATE IN THE MODERNIZATION OF THE E-RATE PROGRAM.

